

## CLAIMS

What is claimed is:

1. A method for creating a protocol dependent control path for instrument applications, comprising:
  - obtaining identification of a client, wherein the client is configured to invoke an instrument application, wherein the client is configured to communicate using a client specific protocol, and wherein the application is configured to communicate using a application specific protocol;
  - obtaining identification of the application;
  - obtaining identification of the client specific protocol;
  - obtaining identification of the application specific protocol; and
  - automatically creating a control path between the client and the application.
2. The method as recited in claim 1, further comprising:
  - recording the identification of the client;
  - recording the identification of the application;
  - recording the identification of the client specific protocol; and
  - recording the identification of the application specific protocol.

- 2           3.       The method as recited in claim 1, wherein the application specific  
              protocol differs from the client specific protocol.
- 2           4.       The method as recited in claim 1, further comprising:  
  
              repeating the method steps of claim 1 for the client and a second  
4           application, wherein the second application is configured to communicate  
              using a second application specific protocol and wherein the second  
6           application specific protocol differs from the application specific  
              protocol.
- 2           5.       The method as recited in claim 1, further comprising:  
  
              repeating the method steps of claim 1 for a second client and the  
4           application, wherein the second client is configured to communicate using  
              a second client specific protocol and wherein the second client specific  
6           protocol differs from the client specific protocol.
- 2           6.       The method as recited in claim 1, further comprising:  
  
              repeating the method steps of claim 1 for a second client and a second  
4           application, wherein the second client is configured to communicate using  
              a second client specific protocol, wherein the second application is  
6           configured to communicate using a second application specific protocol,  
              and wherein the second client specific protocol differs from the client  
8           specific protocol.
- 2           7.       The method as recited in claim 1, wherein the second application specific  
              protocol differs from the application specific protocol.

- 2           8.       A computer readable memory device embodying a computer program of  
instructions executable by the computer, the instructions comprising:
- 4                   obtaining identification of a client, wherein the client is configured to  
invoke an instrument application, wherein the client is configured to  
6                   communicate using a client specific protocol, and wherein the application  
communicates using a application specific protocol;
- 8                   obtaining identification of the application;
- 10                  obtaining identification of the client specific protocol;
- 12                  obtaining identification of the application specific protocol; and
- 14                  automatically creating a control path between the client and the  
16                  application.
- 2           9.       The computer readable memory as recited in claim 8, the instructions  
further comprising:
- 4                   recording the identification of the client;
- 6                   recording the identification of the application;
- 8                   recording the identification of the client specific protocol; and
- 10                  recording the identification of the application specific protocol.
10.       The computer readable memory as recited in claim 8, wherein the

2 application specific protocol differs from the client specific protocol.

11. The computer readable memory as recited in claim 8, the instructions  
2 further comprising:

4 repeating the method steps of claim 1 for the client and a second  
application, wherein the second application is configured to communicate  
6 using a second application specific protocol and wherein the second  
application specific protocol differs from the application specific  
8 protocol.

12. The computer readable memory as recited in claim 8, the instructions  
2 further comprising:

4 repeating the method steps of claim 1 for a second client and the  
application, wherein the second client is configured to communicate using  
6 a second client specific protocol and wherein the second client specific  
protocol differs from the client specific protocol.

13. The computer readable memory as recited in claim 8, the instructions  
2 further comprising:

4 repeating the method steps of claim 1 for a second client and a second  
application, wherein the second client is configured to communicate using  
6 a second client specific protocol, wherein the second application is  
configured to communicate using a second application specific protocol,  
8 and wherein the second client specific protocol differs from the client  
specific protocol.

14. The computer readable memory as recited in claim 8, wherein the second

2 application specific protocol differs from the application specific  
protocol.

15. A system comprising:

2  
a management logic module configured to obtain identification of a client,  
4 to obtain identification of an instrument application, to obtain  
identification of the client specific protocol, to obtain identification of the  
6 application specific protocol, and to automatically create a control path  
between the client and the application, wherein the client is configured to  
8 invoke the application, wherein the client is configured to communicate  
using a client specific protocol, wherein the application is configured to  
10 communicate using a application specific protocol, and wherein the  
application specific protocol differs from the client specific protocol.

16. The system as recited in claim 15, wherein the control path comprises:

2  
a communication logic module configured to receive communications  
4 from the client which conform to the client specific protocol, to translate  
such communications into communications to which the application is  
6 configured to understand and to which the application is configured to  
appropriately react, and to transfer the translated communications to the  
8 application.

17. The system as recited in claim 16, wherein the communication logic  
2 module comprises:

4 a server logic module configured to receive the communications from the  
client; and

6

8 a translator logic module configured to receive the communications from  
the server logic module and to translate the received communications into  
communications to which the application is configured to understand and  
10 to which the application is configured to appropriately react, and to  
transfer the translated communications to the application.

18. The system as recited in claim 16, wherein the system further comprises:  
2  
the application, wherein the application comprises a virtual instrument  
4 and an application component logic module and wherein the virtual  
instrument is configured to receive communications from the  
6 communication logic module and to perform any additional translation of  
the communications into communications to which the application  
8 component logic module is configured to understand and to which the  
application component logic module is configured to appropriately react,  
10 and to transfer such communications to the application component logic  
module.

19. The system as recited in claim 16, wherein the system further comprises:  
2  
an additional communication logic module configured to receive  
4 additional communications from an additional client which conform to an  
additional client specific protocol, to translate such additional  
6 communications into communications to which an additional application  
is configured to understand and to which the additional application is  
8 configured to appropriately react, and to transfer the translated additional  
communications to the additional application.

20. The system as recited in claim 16, wherein the system further comprises:  
2

an additional communication logic module configured to receive  
4 additional communications from an additional client which conform to an  
additional client specific protocol, to translate such additional  
6 communications into communications to which the application is  
configured to understand and to which the application is configured to  
8 appropriately react, and to transfer the translated additional  
communications to the application.